

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/616,842	LIN ET AL.
	Examiner	Art Unit
	Toan D. Nguyen	2616

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 5/11/06.
2.  The allowed claim(s) is/are 30-54, and 60-72 are renumbered 1-38, respectively.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date 7/24/06 .
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. James A. Blanchette on July 24, 2006.

2. The application has been amended as follows:

**IN THE CLAIMS:**

In claim 44 line 2, the limitation "each output port" has been replaced by --- each of the output ports ---.

In claim 51 line 4, the limitation "supported by the apparatus" has been deleted.

In claim 70 line 1, the limitation "wherein probability" has been replaced by --- wherein the probability ---.

***Allowable Subject Matter***

3. The following is an examiner's statement of reasons for allowance:

Regarding claim 30, the prior art fails to teach a combination of the step of:

C. a classifier configured to assign packets received by the input ports to  $X^*Y$  classes of service, where \* represents multiplication, and mapping the  $X^*Y$  classes of service to the X classes of service that are supported by the router, the classifier assigning to the packet one of Y associated levels of priority, wherein each level of

priority is associated with a different probability of packet loss, in the specific combination as recited in the claim.

Regarding claim 37, the prior art fails to teach a combination of the step of:

D. a buffer subsystem configured to retain the packets in class of service per output port queues based on probabilities of discard associated with  $X^*Y$  classes of service, where  $Y$  represents a number and  $*$  represents multiplication, in the specific combination as recited in the claim.

Regarding claim 45, the prior art fails to teach a combination of the step of:

means for retaining packets based on probabilities of discard associated with the  $X^*Y$  classes of service, in the specific combination as recited in the claim.

Regarding claim 50, the prior art fails to teach a combination of the step of:

receiving packets through one or more input ports and assigning the packets to  $X^*Y$  classes of service, where  $*$  represents multiplication,  $X$  represents a number of classes of service and  $Y$  represents a number, in the specific combination as recited in the claim.

Regarding claim 60, the prior art fails to teach a combination of the step of:

a port to receive packets, each packet having a field that indicates one of a second number of classes of service, the second number of classes of service greater than the first number of classes of service, in the specific combination as recited in the claim.

Regarding claim 60 and claim 72, the prior art fails to teach a combination of the step of:

receiving packets, each packet having a field that indicates one of a second number of classes of service, the second number of classes of service greater than the first number of classes of service, in the specific combination as recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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